CambridgeMATHS NSW Stage 5 Year 9 Core & Standard Paths

Every section of every chapter mapped to the NSW Syllabus

Key:

Consolidating Stage 4	The Pathway to Standard book provides ample opportunities to consolidate prior learning
Stage 4 plus Stage 5 Core	Some sections begin in Stage 4 then progress to Stage 5 Core
Stage 5 Core	The treatment of Stage 5 Core is somewhat slower and gentler than the Core & Advanced/Extension Paths book
Stage 5 Core and Stage 5 Path	There are only 6 topics identified as 'Path topics for Standard'. They are mostly in the Year 10 book
Extending beyond Stage 5 Core and Path Topics for Standard	These sections cover extra concepts which are somewhat useful for Stage 6 Standard

	Chapter 1 Integers, decimals, fractions, ratios and rates	
1A	Adding and subtracting positive and negative integers	Consolidating Stage 4
1B	Multiplying and dividing positive and negative integers	Consolidating Stage 4
1C	Decimal places and significant figures	Stage 4 plus Stage 5 Core: *Numbers of any magnitude*
1D	Rational numbers and irrational numbers	Consolidating Stage 4
1E	Adding and subtracting fractions	Consolidating Stage 4
1F	Multiplying and dividing fractions	Consolidating Stage 4
1G	Ratios	Consolidating Stage 4
1H	Rates	Consolidating Stage 4
	Chapter 2 Financial mathematics	
2A	Percentages, fractions and decimals	Consolidating Stage 4
2B	Applying percentages	Consolidating Stage 4
2C	Percentage increase and decrease	Consolidating Stage 4
2D	Profits and discounts	Consolidating Stage 4
2E	Income	Stage 5 Core: *Financial Mathematics A*
2F	Taxation	Stage 5 Core: *Financial Mathematics A*
2G	Simple interest	Stage 5 Core: *Financial Mathematics A*
2H	Applications of simple interest	Stage 5 Core: *Financial Mathematics A*
	Chapter 3 Expressions and equations	
3A	Algebraic expressions	Consolidating Stage 4
3B	Adding and subtracting algebraic expressions	Consolidating Stage 4
3C	Multiplying and dividing algebraic expressions	Consolidating Stage 4
3D	Expanding algebraic expressions	Stage 5 Core: *Algebraic techniques A*
3E	Linear equations with a pronumeral on one side	Consolidating Stage 4
3F	Linear equations involving fractions	Stage 5 Core: *Equations A*
3G	Linear equations involving brackets	Stage 5 Core: *Equations A*
3H	Equations with pronumerals on both sides	Stage 5 Core: *Equations A*
3I	Using linear equations to solve problems	Stage 5 Core: *Equations A*
3J	Using formulas	Stage 5 Core: *Equations A*
	Chapter 4 Right-angled triangles	
4A	Exploring Pythagoras' theorem	Consolidating Stage 4
4B	Finding the length of the hypotenuse	Consolidating Stage 4
4C	Finding the lengths of the shorter sides	Consolidating Stage 4
4D	Using Pythagoras' theorem to solve two-dimensional problems	Consolidating Stage 4
4E	Introducing the trigonometric ratios	Stage 5 Core: *Trigonometry A*
4F	Finding unknown sides	Stage 5 Core: *Trigonometry A*
4G	Solving for the denominator	Stage 5 Core: *Trigonometry A*
4H	Finding unknown angles	Stage 5 Core: *Trigonometry A*
4I	Using trigonometry to solve problems	Stage 5 Core: *Trigonometry A and B*
	Chapter 5 Linear relationships	
5A	Points and lines on the Cartesian plane	Stage 4 plus Stage 5 Core: *Linear relationships A*
5B	The x-intercept and y-intercept	Stage 5 Core: *Linear relationships A*
5C	Graphing straight lines using intercepts	Extending: Stage 5 Path (Adv): *Linear Relationships C*
5D	Lines with only one intercept	Stage 5 Core: *Linear relationships A*
5E	Gradient from rise and run	Stage 5 Core: *Linear relationships A*
5F	Gradient and direct variation	Stage 5 Core and Stage 5 Path (Stan/Adv): *Variation and rates A*
5G	Gradient–intercept form	Stage 5 Core: *Linear relationships A*
5H	Finding the equation of a line using y = mx + c	Stage 5 Core: *Linear relationships A*
5I	Midpoint and length of a line segment from diagrams	Stage 5 Core: *Linear relationships A*
5J	Linear relationships in real-life contexts	Stage 5 Core: *Linear relationships B*
	Chapter 6 Length, area, surface area and volume	
6A	Length and perimeter	Consolidating Stage 4
6B	Circumference of circles and perimeter of sectors	Consolidating Stage 4
6C	Area of quadrilaterals and triangles	Consolidating Stage 4
6D	Area of circles	Consolidating Stage 4
6E	Perimeter and area of composite shapes	Stage 4 plus Stage 5 Core: *Area & Surface area A*
6F	Surface area of prisms	Stage 5 Core: *Area & Surface area A*
6G	Surface area of cylinders	Stage 5 Core: *Area & Surface area A*
6H	Volume of prisms	Stage 4 plus Stage 5 Core: *Volume A*
6I	Volume of cylinders	Stage 4 plus Stage 5 Core: *Volume A*
	Chapter 7 Indices	
7A	Index notation	Stage 5 Core: *Indices A*
7B	Index laws for multiplying and dividing	Stage 5 Core: *Indices A*
7C	The zero index and power of a power	Stage 5 Core: *Indices A*
7D	Index laws extended	Stage 5 Core: *Indices A*
7E	Negative indices	Stage 5 Core: *Indices A*
7F	Scientific notation	Stage 5 Core: *Numbers of any magnitude*

7G	Scientific notation using significant figures	Stage 5 Core: *Numbers of any magnitude*
	Chapter 8 Properties of geometrical figures	
8A	Angles and triangles	Consolidating Stage 4
8B	Parallel lines	Consolidating Stage 4
8C	Quadrilaterals	Consolidating Stage 4
8D	Polygons	Extending: Stage 5 Path (Ext): *Properties of geometrical figures B*
8E	Enlargement and similar figures	Stage 5 Core: *Properties of geometrical figures A*
8F	Applying scale factor to similar triangles	Stage 5 Core: *Properties of geometrical figures A*
	Chapter 9 Quadratic expressions and algebraic fractions	
9A	Reviewing algebra	Consolidating Stage 4
9B	Expanding binomial products	Stage 5 Core: *Algebraic techniques A*
9C	Expanding perfect squares	Stage 5 Core: *Algebraic techniques A*
9D	Difference of two squares	Stage 5 Core: *Algebraic techniques A*
9E	Using HCF to factorise algebraic expressions	Consolidating Stage 4
9F	Simplifying algebraic fractions: multiplication and division	Stage 5 Core: *Algebraic techniques A*
9G	Simplifying algebraic fractions: addition and subtraction	Stage 5 Core: *Algebraic techniques A*
	Chapter 10 Probability and data analysis	
10A	Probability review	Consolidating Stage 4
10B	Venn diagrams and two-way tables	Extending: Stage 5 Path (Adv): *Probability B*
10C	Using arrays for two-step experiments	Stage 5 Core: *Probability A*
10D	Using tree diagrams	Stage 5 Core: *Probability A*
10E	Using relative frequencies to estimate probabilities	Stage 5 Core: *Probability A*
10F	Mean, median, mode and range	Consolidating Stage 4
10G	Interpreting data from tables and graphs	Stage 5 Core: *Data analysis A*
10H	Stem-and-leaf plots	Stage 5 Core: *Data analysis A*
10I	Grouping data into classes	Stage 5 Core: *Data analysis A*

Contents are subject to change prior to publication